

October 12, 2009

DELTA ENVIRONMENTAL PRODUCTS, INC.
PENTAIR PUMP GROUP
MIKE CATANZARO
PO BOX 969
DENHAM SPRINGS LA 70727

Re: Description: SEWAGE TREATMENT SYSTEMS, AERATED (also see SEWAGE TREATMENT APPARATUS)
Manufacturer: DELTA ENVIRONMENTAL PRODUCTS, INC.
Product Name: ECOPOD-D COMMERCIAL WW TREATMENT UNIT
Model Number(s): **ECOPOD D-SERIES**
MODELS: 300D, 350D, 400D, and 450D
[SEE MAX. DWF IN GALS./DAY; MAX. CBOD5 IN LBS./DAY AND MIN. TANK/CHAMBER CAPACITIES INCLUDED WITHIN STIPULATIONS BELOW]
Product File No: 20090321

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. **This approval is valid until the end of October 2014.**

This approval is contingent upon compliance with the following stipulation(s):

- This product must be installed in accordance with the manufacturer's printed instructions, the plan approval and s. Comm 83.15 (4), Wis. Admin. Code. If there is a conflict between the manufacturer's instructions and the plan approval, the plan approval and code requirements will take precedence.
- This product may only be installed by a master plumber or journeyman plumber or plumbing apprentice working under the supervision of a master plumber.
- When this product receives wastewater from dwellings and is used as a septic tank, it will produce an effluent quality with a maximum monthly average value for BOD5 of greater than 30 mg/L and less than or equal to 220 mg/L TSS, or greater than 30 mg/L or less than or equal to 150 mg/L TSS, and F.O.G. of less than 30 mg/L.
- This product must be utilized in accordance with the manufacturer's printed installation instructions and this product approval. If there is a conflict between the manufacturer's installation instructions and the product approval, the product approval requirements will take precedence.
- The elevation of the system's infiltrative surface must be above the estimated highest groundwater elevation or bedrock by the distance prescribed in column entitled "Fecal Coliform >10000 cfu/100 ml" in Table Comm 83.44-3, Wis. Adm. Code.
- A state Sanitary Permit must be obtained when this product is installed in a septic tank that is required to have an effluent filter installed, which is capable of filtering particles of 1/32 inch in size or larger.

- A copy of this approval letter and the manufacturer's printed installation instructions must be supplied to the buyer of this product.
- DESCRIPTION: Pre-packaged, modular, fixed-film aerobic wastewater treatment unit consisting of trash, primary and reactor tanks/chambers of capacities listed herein by model, based on influent CBOD5; may be installed singly or in a series.

Table 1
Maintenance, Inspection, Pumping Requirements
Delta Environmental—ECOPOD D-Series
(models: 300D, 350D, 400D and 450D)

Initial/Startup Inspection/ Maintenance	Two-year service policy
Routine Inspection/Maintenance	6-month effluent quality and reactor tank Sludge levels
Ongoing Pumping Cycle And/Or Requirements	Pumping interval related to 15-inch depth of sludge when necessary; or as per local requirements
Back-Wash Cycle	NSF 40 Effluent Standard* N/A
NSF 40 Effluent Standard*	NSF 40 Class 1 Effluent Standard*
BOD5 Credit For Downsizing Distribution Area	YES
Fecal Credit For Reduction Of Vertical Separation	YES, only with UV disinfection (TROJAN UV 3000 with UV intensity monitoring and fail safe at end light at 40 uJ); Chlorination and/or de-chlorination
Additional Comments	Water softener discharges not recommended

* NOTE: NSF/ANSI 40 Effluent Standard - Class I, Class 2, and None or NA

Table 2
Design Specifications by Model*

MODEL	Maximum CBOD5 in lbs./day	Maximum Design Flow+ in GPD	Primary Tank Volume in Gals.	Reactor Tank Volume in Gals.
E300D	7.5	3,000	1,500-3,000	5,000
E350D	8.75	3,500	1,750-3,500	5,000
E400D	10.0	4,000	2,000-4,000	5,000
E450D	11.25	4,500	2,250-4,500	5,000

* Designs may include single or multiple units. For each added unit the primary tank capacity is commensurate with the model requirements.

+ Based on NSF Testing per 500 gallons per day is rated for 300 mg/l.

- Individual system plan approval must be obtained from COMMERCE or the appropriate agent county for each installation of this product prior to its installation.
- When this product is installed in a state-approved septic tank, a properly licensed person must perform the installation.
- All of the following conditions apply to this approval:
 - . All electrical connections must comply with ch. Comm 16;
 - . An operation and maintenance plan based on the model/design must be available from the manufacturer;
 - . No chloride or nitrate removal is sought;
 - . Spent media must be washed within tank and incur proper disposal.
- With UV disinfection, this devices is expected to produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L and fecal coliform of less than or equal to 10,000 cfu/100mL.

- With UV disinfection and when this product receives wastewater from dwellings, it will produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L and fecal coliform of less than or equal to 10,000 cfu/100mL. For commercial use, refer to max. CBOD5 in lbs./day as defined in the specific POWTS plan.
- When fecal reduction credits are included in the design, the UV unit and/or chlorination/de-chlorination unit shall follow downstream of the tank(s) dedicated to the ECOPOD D unit(s).
- When this product receives wastewater from dwellings and no UV or chlorination/de-chlorination is included, it will produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L.
- **These models are only approved for insertion based on Delta Installation Instructions into a state-approved 5,000 gal. septic tank manufactured by Huffcutt Concrete, Inc.**
- Additional information is included as attachment(s) to this letter; **see attachment A and B.**

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

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Attachment A and B.